LIVE OAK ASSOCIATES, INC.
an Ecological Consulting Firm

BIOTIC ASSESSMENT
EVERGREEN COMMUNITY COLLEGE SITE

Prepared by

Live Oak Associates, Inc.

Rick A. Hopkins, Ph.D., Principal, Senior Biologist
Melissa Denena, M.S., Project Manager, Wildlife/Wetland/Plant Ecologist

Prepared for

John Hesler
David J. Powers and Associates
1885 The Alameda
San Jose, CA 95126

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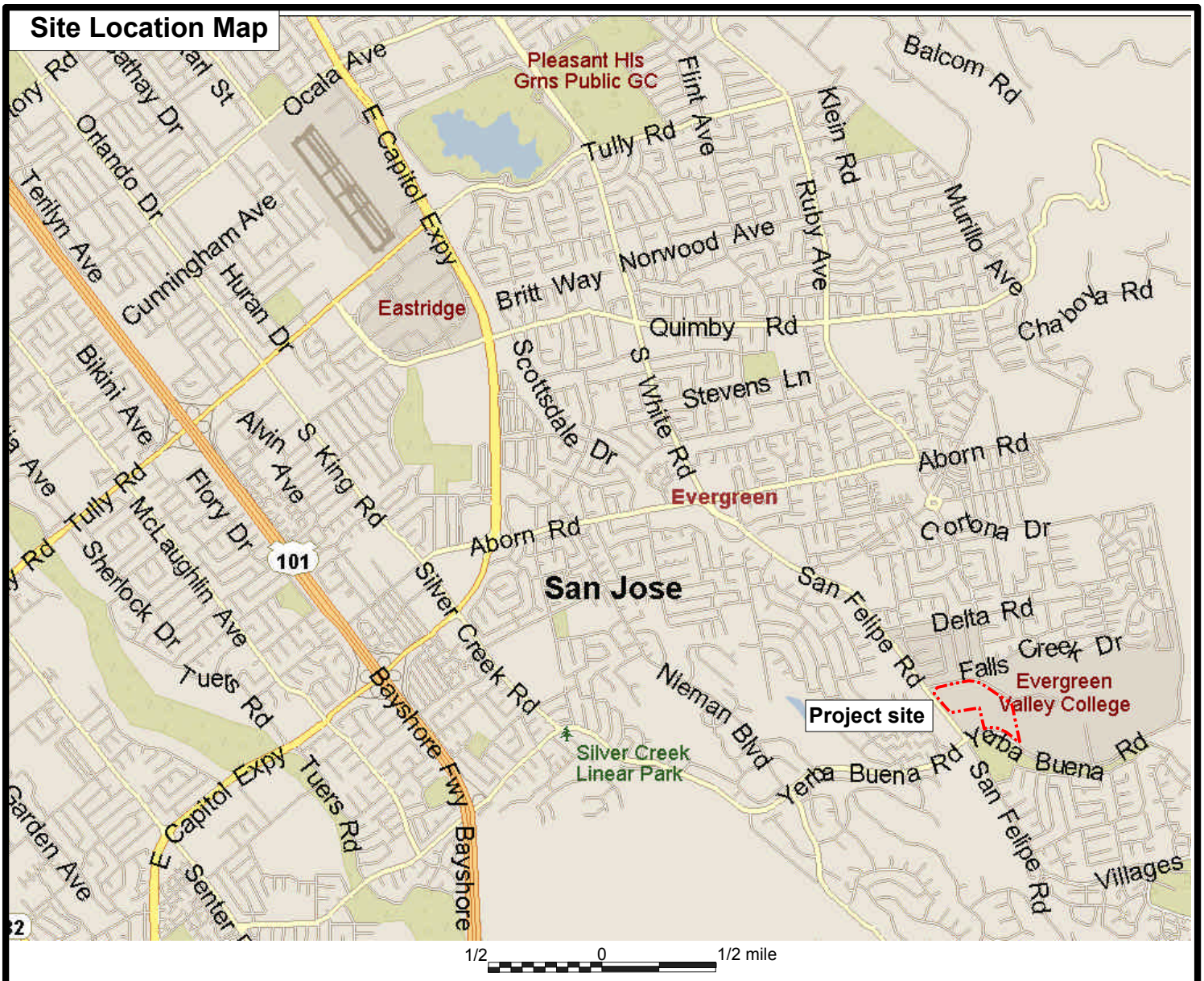
1.0 INTRODUCTION

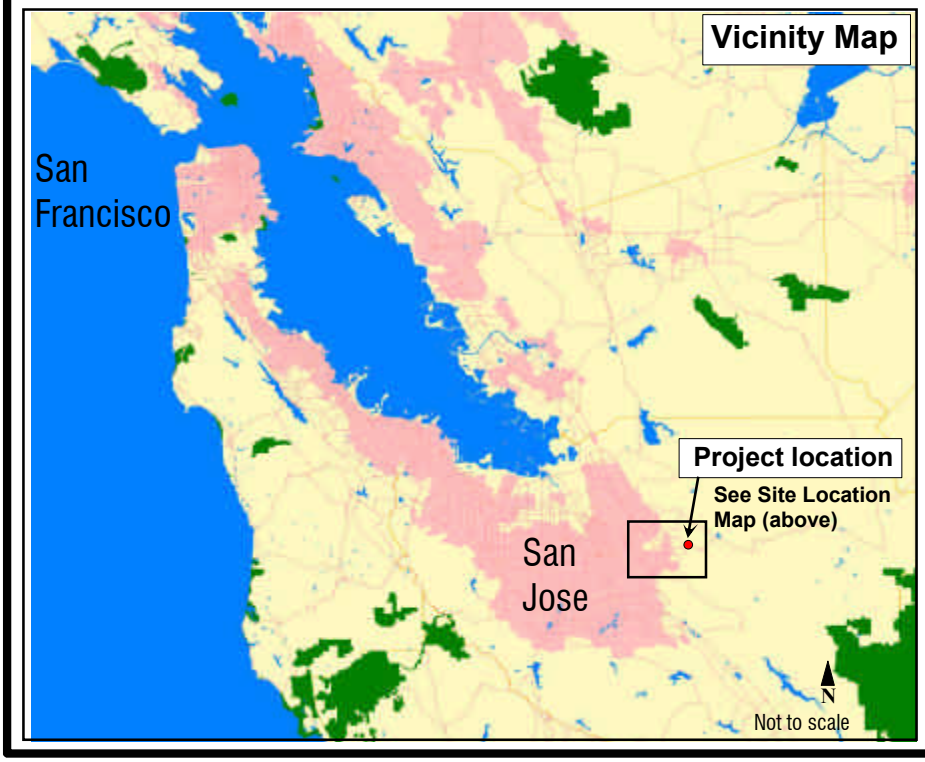
This report describes the biotic resources of an approximately 28-acre site in the City of San Jose in Santa Clara County, California, and evaluates possible constraints such resources may pose for eventual site development. This biotic assessment is being conducted in support of the Evergreen Smart Growth Plan EIR. The study area (also referred to as "the site") is located just northeast of the intersection of Yerba Buena Road and San Felipe Road in the Evergreen area of east San Jose (Figure 1). The majority of the site consists of low quality (ruderal) non-native grassland habitat, some of which is associated with an orchard. A portion of the site is already developed in the form of office buildings and associated facilities (parking lots, driveways, etc.). The location of the site can be found on the San Jose East U.S.G.S. 7.5' quadrangles at Township 7 south, Range 2 east, northwestern corner of Section 28 and northeastern corner of Section 27.

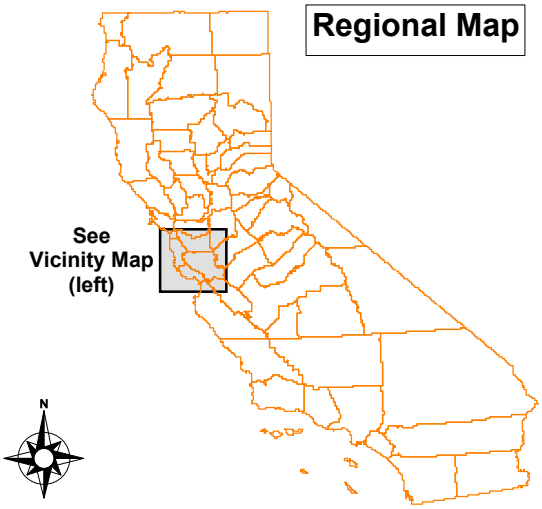
The proposed project is the development of the existing site into commercial and residential development. Proposed construction includes commercial retail (75,000 to 95,000 square feet), commercial office (75,000 square feet), multi-family residential (540 to 630 units), townhomes (60 to 70 homes), open space/parks (two acres), and a library.

Site development of open space parcels can damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), covered by policies and ordinances of the City of San Jose, or some combination of these four conditions. This report addresses issues related to sensitive biotic resources occurring on the site, along with the federal, state, and local laws related to such resources and mitigation measures that may be required to reduce the magnitude of anticipated impacts.

The analysis of impacts, as discussed in Section 3.0 of this report, was based on the known and potential biotic resources of the study area (discussed in Section 2.0). Sources of information used in the preparation of this analysis included: (1) the *California Natural Diversity Data Base* (CDFG 2003) and (2) the *Inventory of Rare and Endangered Vascular Plants of California*







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Evergreen Community College
Site / Vicinity Map

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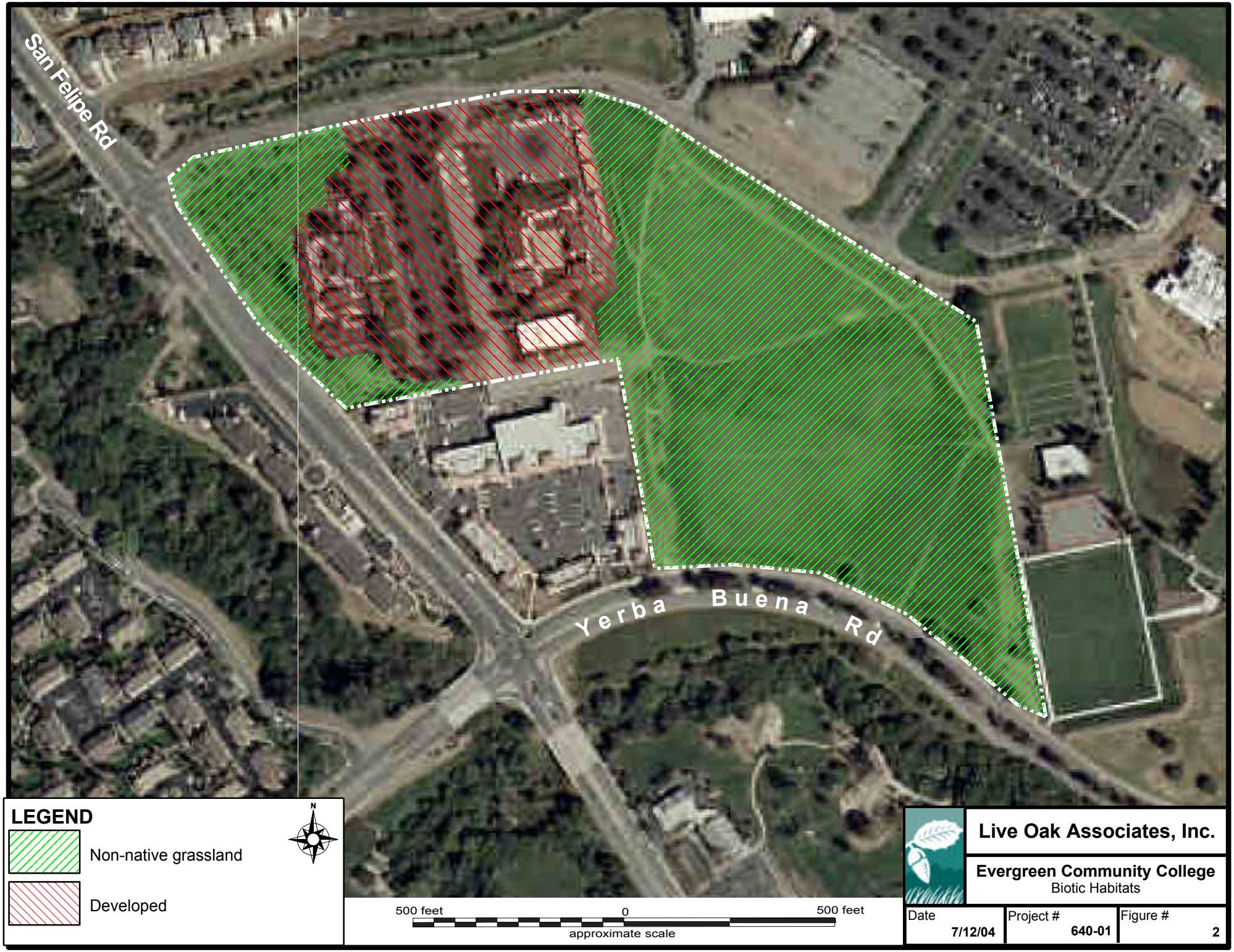
(CNPS 2001) and (3) manuals and references related to plants and animals of the Santa Clara Valley region. Reconnaissance level field surveys were conducted within the study area on July 5, 2004 by Melissa Denena, ecologist with Live Oak Associates, Inc., at which time the principal biotic habitats of the site were identified and the constituent plants and animals of each were noted (Figure 2). Ms. Denena also conducted protocol-level burrowing owl surveys on the site July 5, 13, 14, and 15 of 2004.


San Felipe Rd
Yerba Buena Rd
LEGEND
Non-native grassland
Developed
N
500 feet
0
500 feet
approximate scale
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Evergreen Community College
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2.0 EXISTING CONDITIONS

The approximately 28-acre study area is located in the City of San Jose in Santa Clara County. The site is bounded to the north by Paseo de Arboles and single-family residences, to the east by development associated with the Evergreen Community College, to the south by Yerba Buena Road and Evergreen Park/Yerba Buena Creek, and to the west by San Felipe Road and a retirement community. The site is topographically level at an elevation of approximately 310 to 350 feet National Geodetic Vertical Datum (NGVD). One biotic habitat occurs on the study area, non-native grassland, and a portion of the site consisted of preexisting development, The Academy, South Bay Regional Safety Training Consortium.

Two soil-mapping units have been identified on the site and these soils are described in greater detail in Table 1 and depicted in Figure 3. None of the soils occurring on the site are considered to be hydric, although hydric soil inclusions may occur.

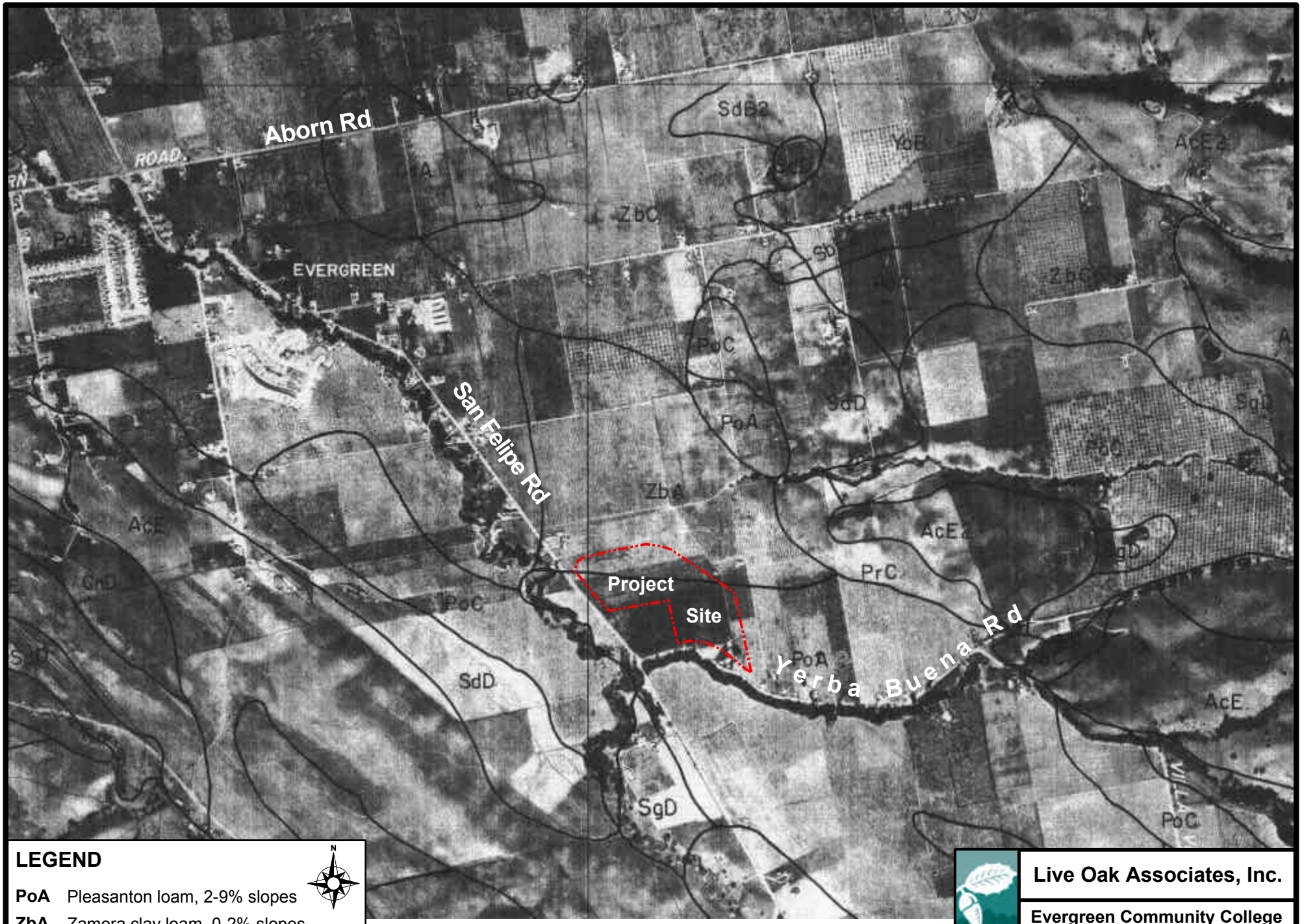
Table 1. Descriptions of soil mapping units of the 28-acre study area (NRCS 1968).

Soil Mapping Unit	Drainage Class	Parent Material
Pleasanton Loam, 2-9% Slopes	Well Drained	Sedimentary Alluvium
Zamora Clay Loam, 0-2% Slopes	Well Drained	Alluvium of Mixed Orgin

Annual precipitation in the general vicinity of the study area averages 16 to 25 inches, almost 85% of which falls between October and March. Virtually all precipitation falls in the form of rain. Stormwater runoff readily infiltrates the soils of the site, but when field capacity has been reached, gravitational water flows off of the site into storm drains, which empty into creeks in the vicinity of the site.

2.1 BIOTIC HABITATS

One biotic habitat and one man-altered habitat have been identified on the study area (Table 2 and Figure 2). For the purposes of this study, these natural terrestrial communities are identified as follows: non-native grassland and developed. A list of the animal species that are known to



LEGEND

PoA Pleasanton loam, 2-9% slopes

ZbA Zamora clay loam, 0-2% slopes

Source:
Soil Conservation Service and the Department of Soils and Plant Nutrition, University of California, July 1968

1/2 mile 0 1/2 mile
approximate scale

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Evergreen Community College
Soil Survey

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occur in the vicinity of the site is listed in Appendix A. A list of plant species is not included in this report due to the low diversity. Plant species observed on-site are included in the habitat descriptions below. Trees species of the site are defined in the arborist report compiled by David J. Powers and Associates (October 2004).

2.1.1 Non-Native Grassland

The majority of the site consists of low quality (ruderal) non-native grassland habitat, some of which is associated with an orchard. The term "ruderal" refers to areas that are periodically disturbed by anthropogenic influences. These habitats are characterized by being dominated by non-native grasses and forbs of European origin and typically native vegetation is sparse to non-existent. The grasslands in the northwest corner of the site are associated with an orchard, and the open space between the orchard trees had been recently disced at the time of the 2004 field surveys. The grasslands in the eastern portion are classified as being ruderal due to continued disturbance from people utilizing the site to access the community college. There are numerous footpaths that are void of vegetation and it appears that this portion of the site is managed to minimize vegetation.

Non-native grass species observed while on the site included wild oats (*Avena fatua*), soft chess (*Bromus hordaceus*), barnyard barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*), rattail fescue (*Vulpia myuros*), and Italian wild rye (*Lolium multiflorum*). Common non-native forbs observed included black mustard (*Brassica nigra*), wild radish (*Raphanus sativa*), yellow star thistle (*Centauria solstitialis*), mayweed chamomile (*Anthemis cotula*), puncture weed (*Tribulus terrestris*), cheeseweed (*Malva parviflora*), fireweed (*Epilobium brachycarpum*), rose clover (*Trifolium hirtum*), fiddleneck (*Amsinkia* sp.), curly dock (*Rumex crispus*), redstem filaree (*Erodium cicutarium*), and jimson weed (*Datura stramonium*. A few trees and shrubs were present on the site. These included coyote brush (*Baccharis pilularis*), coast live oak (*Quercus agrifolia*), and coast redwood (*Sequoia sempervirens*).

Non-native grasslands can provide important habitat to many terrestrial vertebrates. As many as 25 species of reptiles and amphibians, 100 species of birds, and 50 species of mammals are known to use grassland habitats of central California (Mayer and Laudenslayer 1988). A number

of these species are expected to utilize the grasslands occurring on the site throughout all or part of the year as breeding and foraging habitat. However, a particular habitat's importance to the wildlife of a region can be affected by many factors including the proximity of nesting sites, the amount of available escape cover, the availability of water and food, as well as levels of human disturbance. Because the site is disturbed on a regular basis either through discing or other human disturbance and is surrounded on all sides by urban development, the site's value as habitat for many wildlife species occurring in the local region is greatly diminished. Nonetheless, some wildlife was observed using the site during the July 2004 surveys, and still other species, which were not directly observed, would be expected to utilize this habitat. These are described in more detail below.

There are a number of reptile species that are expected to occur on the project site within the grassland habitat Western fence lizards (*Sceloporus occidentalis*) were observed during the July 2004 field surveys. Other species that may occur on the site include California alligator lizards (*Elgaria multicarinatus*) and gopher snakes (*Pituophis melanoleucus*), all of which feed on insects, small mammals, and birds.

Resident and migratory birds breed and forage in grassland habitats. Birds observed in the grasslands of the site include mourning doves (*Zenaida macroura*), killdeers (*Charadrius vociferus*), western scrub jays (*Aphelocoma californica*), California towhees (*Pipilo crissalis*), dark-eyed juncos (*Junco hyemalis*), and Nuttall's woodpeckers (*Picoides nuttallii*). Red-tailed hawks (*Buteo jamaicensis*), American kestrels (*Falco sparverius*), and turkey vultures (*Cathartes aura*) are expected to forage on the site.

Several species of mammals were either observed in the grasslands of the site or would be expected to occur there from time to time. California ground squirrels (*Spermophilus beecheyi*), Botta's pocket gophers (*Thomonys bottae*), and black-tailed jackrabbits (*Lepus californicus*) were observed during the surveys. Other small mammals not observed during the survey but likely to occur here include western harvest mouse (*Reithrodontomys megalotis*) and California meadow vole (*Microtus californicus*). The opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*) would be expected to forage for prey on-site, however, because of the urban

surroundings, it is unlikely that larger mammalian predators such as the coyote (*Canis latrans*), bobcat (*Felis rufus*) or cougar (*Puma concolor*) occur on the site with any regularity.

2.1.2 Developed

The portion of the site designated as developed consists of office buildings and associated facilities (parking lots, driveways, etc.) for The Academy, South Bay Regional Safety Training Consortium. These areas provide limited habitat for the plant and animal species of the area. Habitat for naturally growing plant species has been converted to landscaped flowerbeds and lawns. A few wildlife species may infrequently utilize the trees and shrubs in these areas for perching and possibly breeding. Also, the species that occur in the grassland habitat may occasionally pass through the developed portion of the site.

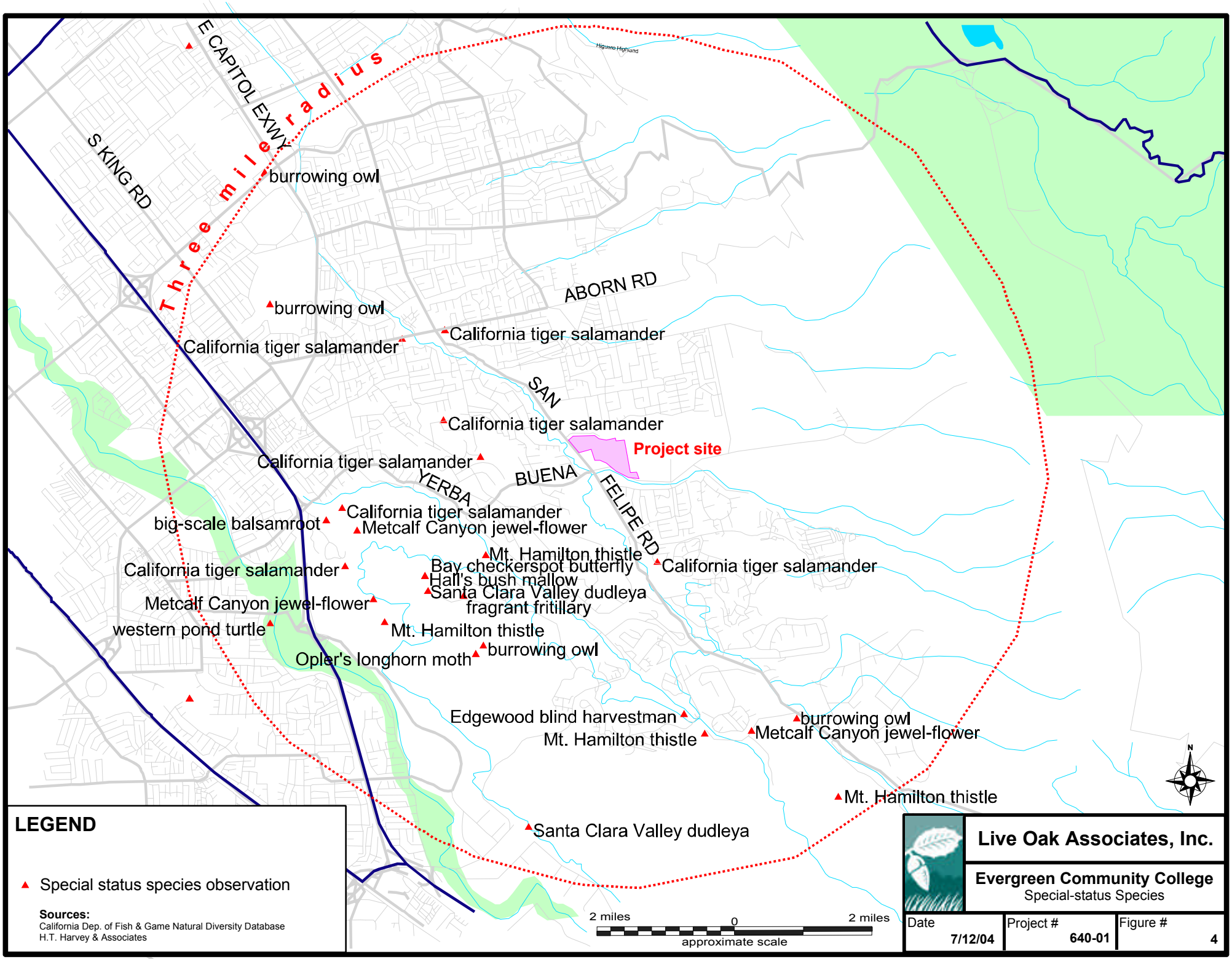
2.2 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened or endangered (CNPS 2001). Collectively, these plants and animals are referred to as "special status species."

A number of special status plants and animals occur in the vicinity of the study area. These species, and their potential to occur in the study area, are listed in Table 2 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988-1990), *California Natural Diversity Data Base* (CDFG 2003), *Endangered and Threatened Wildlife and Plants* (USFWS 2003), *Annual Report on the Status of California*

State Listed Threatened and Endangered Animals and Plants (CDFG 2002), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001). This information was used to evaluate the potential for special-status plant and animal species to occur on site. Figure 4 shows the location of special status species found by the California Natural Diversity Data Base (CNDDB) within a three-mile radius of the project site. It is important to note that CNDDB is a volunteer database and, therefore, it may not contain all known or gray literature records of special status species occurrences.

A search of published accounts for all of the relevant special status plant and animal species was conducted for the San Jose East U.S.G.S 7.5 minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Calavaras Reservoir, Mount Day, Lick Observatory, Morgan Hill, Santa Teresa Hills, Los Gatos, San Jose West and Milpitas) using the California Natural Diversity Data Base Rarefind 2003. Plant species reviewed for these quadrangles included those on CNPS List 1A, 1B, 2, and 4.


E CAPITOL EXWY
S KING RD
Three mile radius
ABORN RD
SAN
BUENA
YERBA
FELIPE RD
Project site
burrowing owl
burrowing owl
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
big-scale balsamroot
Metcalf Canyon jewel-flower
Mt. Hamilton thistle
Bay checkerspot butterfly
Hall's bush mallow
Santa Clara Valley dudleya
fragrant fritillary
California tiger salamander
Metcalf Canyon jewel-flower
western pond turtle
Mt. Hamilton thistle
Opler's longhorn moth
burrowing owl
Edgewood blind harvestman
Mt. Hamilton thistle
burrowing owl
Metcalf Canyon jewel-flower
Mt. Hamilton thistle
Santa Clara Valley dudleya
LEGEND
Special status species observation
Sources:
California Dep. of Fish & Game Natural Diversity Database
H.T. Harvey & Associates
2 miles
0
2 miles
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N
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Special-status Species
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TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFG 2003 and CNPS 2001)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Contra Costa Goldfields (*Lasthenia conjugens*)	FE	Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline, at elevations between 0 and 470 meters.	**Absent.** Vernal pools and alkaline soils are absent from the study area.
Coyote Ceanothus (*Ceanothus ferrisae*)	FE	Occurs in chaparral, coastal scrub, valley and foothill grassland on serpentine, at elevations between 120 and 460 meters.	**Absent.** Serpentine soils are absent from the study area.
Metcalf Canyon Jewel Flower (*Streptanthus albidus* ssp. a*lbidus*)	FE	Valley and foothill grasslands on serpentine, at elevations between 45 and 800 meters.	**Absent.** Serpentine soils are absent from the study area.
Robust Spineflower (*Chorizanthe robusta* var. *robusta*)	FE	Occurs within cismontane woodlands and coastal dunes/scrub.	**Absent.** Suitable habitat is absent from the study area.
Santa Clara Valley Dudleya (*Dudleya setchellii*)	FE	Occurs on serpentine outcrops in valley and foothill grasslands, at elevations between 60 and 365 meters.	**Absent.** Serpentine soils are absent from the study area.
Tiburon Indian Paintbrush (*Castilleja affinis* ssp. *neglecta*)	FE, CT	Occurs in valley and foothill grassland on serpentine, at elevations between 60 and 400 meters.	**Absent.** Serpentine soils are absent from the study area.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Alkali Milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Occurs on playas, alkaline vernal pools, and adobe clay valley and foothill grasslands below 60 meters in elevation.	**Absent.** Suitable habitat is absent from the study area.
Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)	CNPS 1B	Chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine, at elevations between 90 and 1400 meters.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are either routinely disced (within the orchard area) or in very poor condition (ruderal).
Caper-fruited Tropidocarpum (*Tropidocarpum capparideum*)	CNPS 1A	Occurs in alkaline soils of valley and foothill grassland, at elevations between 1 and 455 meters.	**Absent**. Suitable habitat is absent. Alkaline soils do not occur within the study area. Species last documented in our area in 1957.
Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*)	CNPS 1B	Occurs in alkaline soils of valley and foothill grasslands, at elevations between 0 and 425 meters.	**Absent.** Suitable habitat is absent. Alkaline soils do not occur within the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Other special status plants listed by CNPS (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Fragrant Fritillary (*Fritillaria liliacea*)	CNPS 1B	Occurs in coastal prairie, coastal scrub, and valley and foothill grasslands, often on serpentine soils, at elevations between 3 and 410 meters.	**Absent.** Suitable habitat is absent from the study area.
Hairless Popcorn Flower (*Plagiobothrys glaber*)	CNPS 1A	Occurs in heavy clay soils of alkaline meadows, at elevations between 15 and 180 meters.	**Absent**. Suitable habitat is absent. Alkaline soils do not occur within the study area. Last confirmed observance of species was in 1954.
Hall's Bush Mallow (*Malacothamnus hallii*)	CNPS 1B	Occurs in chaparral and coastal scrub, at elevations between 10 and 760 meters.	**Absent.** Suitable habitat is absent from the study area.
Loma Prieta Hoita (*Hoita strobilina*)	CNPS 1B	Occurs in chaparral and cismontane and riparian woodlands, often on serpentine, at elevations between 30 and 600 meters.	**Absent.** Suitable habitat is absent from the study area.
Mt. Hamilton Coreopsis (*Coreopsis hamiltonii*)	CNPS 1B	Occurs in rocky cismontane woodlands.	**Absent.** Suitable habitat is absent from the study area.
Mt. Hamilton Thistle (*Cirsium fontinale* var. *campylon*	CNPS 1B	Occurs in seasonal and perennial drainages on serpentine soils, at elevations between 95 and 890 meters.	**Absent.** Serpentine soils are absent from the study area.
Most Beautiful Jewelflower (*Streptanthus albidus* ssp. *peramoenus*)	CNPS 1B	Occurs in chaparral and valley and foothill grasslands on serpentine soils, at elevations between 120 and 1000 meters.	**Absent.** Serpentine soils are absent from the study area.
Point Reyes Bird's-beak (*Cordylanthus maritimus* ssp. *palustris*)	CNPS 1B	Occurs in coastal salt marshes and swamps.	**Absent.** Suitable habitat is absent from the study area.
Prostrate Navarretia (*Navarretia prostrata*)	CNPS 1B	Occurs in coastal scrub, alkaline valley and foothill grasslands, and mesic vernal pools.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are not alkaline.
San Joaquin Saltbush (*Atriplex joaquiniana*)	CNPS 1B	Occurs in chenopod scrub, meadows and seeps, playas, and alkaline valley and foothill grasslands.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are not alkaline.
Santa Cruz Mountains Beardtongue (*Penstemon rattanii* var. *kleei*)	CNPS 1B	Chaparral, lower montane coniferous forest, at elevations between 400-1100 meters.	**Absent.** Suitable habitat is absent from the study area.
Smooth Lessingia (*Lessingia micradenia* ssp. *glabrata*)	CNPS 1B	Occurs in serpentine grassland and chaparral, at elevations between 120 and 420 meters.	**Absent.** Serpentine soils are absent from the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFG 2003 and USFWS 2003)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)	FE	Native grasslands on serpentine soils. Host plant is *Plantago erecta*.	**Absent.** Serpentine soils are absent from the site.
California Tiger Salamander (*Ambystoma californiense*)	FT, CSC	Breeds in vernal pools and stock ponds of central California; adults aestivate in grassland habitats adjacent to the breeding sites.	**Absent.** The site consisted entirely of upland habitat.
California Red-legged Frog (*Rana aurora draytonii*)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	**Absent.** The site consisted entirely of upland habitat.
Peregrine Falcon (*Falco peregrinus*)	CE	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	**Unlikely**. Suitable nesting habitat does not occur on the study area, however, the site may provide foraging habitat for the rare migrant.
Willow Flycatcher (*Empidonax trailii*)	CE (while nesting) FE (*extimus*)	Species breeds in the Sierras and Southern California.	**Absent**. Uncommon migrant; this species would not breed on the study area. Those birds that may pass through the study area are probably not of the federally listed subspecies.

Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Foothill Yellow-legged Frog (*Rana boylii*)	CSC	Found primarily in swiftly flowing creeks.	**Absent.** The site consisted entirely of upland habitat.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	**Absent.** The site consisted entirely of upland habitat.
Cooper's Hawk (*Accipiter cooperii*)	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forest of the Sierra Nevada, but winters in a variety of lowland habitats.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Sharp-shinned Hawk (*Accipiter striatus*)	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada. This species winters in a variety of habitats of the state.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Golden Eagle (*Aquila chrysaetos*)	CSC, CP	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	**Absent.** Suitable breeding and foraging habitat is absent from the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Federal Candidate Species and State Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Northern Harrier (*Circus cyaneus*)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
White-tailed Kite (*Elanus leucurus*)	CP	Open grasslands and agricultural areas throughout central California.	**Possible.** This species may occasionally forage on the study area and marginal nesting habitat occurs in the few trees of the site.
Merlin (*Falco columbarius*)	CSC	This falcon, which breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	**Possible.** The site provides suitable wintering habitat for migrants of this species.
Prairie Falcon (*Falco mexicanus*)	CSC	Distributed from annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Burrowing Owl (*Athene cunicularia*)	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	**Possible.** Suitable habitat was present on the site for this species (i.e. ground squirrel burrows). However, the protocol level surveys conducted in July 2004 determined that this species was absent. Nonetheless, due to the fact that the owl is volant, individuals could move onto the site at a later date.
Vaux's Swift (*Chaetura vauxi*)	CSC	Migrants and transients move through the foothills of the western Sierra in spring and late summer. Breeds in coniferous forests.	**Unlikely.** Migrants and transients may forage on the site, however, suitable breeding habitat is absent from the study area.
Black Swift (*Cypseloides niger*)	CSC	Migrants and transients found throughout many habitats of state. Breed on steep cliffs or ocean bluffs, or in cracks and crevasses of inland deep canyons.	**Unlikely.** Migrants and transients may forage on the site, however, suitable breeding habitat is absent from the study area.
Loggerhead Shrike (*Lanius ludovicianus*)	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	**Possible.** The site provides suitable foraging and marginal breeding habitat for this species.
California Horned Lark (*Eremophila alpestris actia*)	CSC	Short-grass prairie, annual grasslands, coastal plains, open fields.	**Unlikely.** The site provides marginal foraging and breeding habitat for this species.
Tricolored blackbird (*Agelaius tricolor*)	CSC	Breeds near fresh water in dense emergent vegetation.	**Absent.** The site consisted entirely of upland habitat.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Federal Candidate Species and State Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Pallid Bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present within The Academy buildings. However, this species is not expected to roost on site due to the well-kept condition of the buildings.
California Mastiff Bat (*Eumops perotis californicus*)	CSC	Forages over many habitats, requires tall cliffs or buildings for roosting.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present within The Academy buildings. However, this species is not expected to roost on site due to the well-kept condition of the buildings.
Townsend's Big-eared Bat (*Plecotus townsendii townsendii*)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats of the state.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present within The Academy buildings. However, this species is not expected to roost on site due to the well-kept condition of the buildings.
San Francisco Dusky-Footed Woodrat (*Neotoma fuscipes annectens*)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	**Absent.** Woodlands and dense shrub habitat favored by the species are absent from the study area.
Ringtail (*Bassariscus astutus*)	CP	Occurs in riparian and heavily wooded habitats near water.	**Absent.** The site consisted entirely of upland habitat.

Present: Species observed on the sites at time of field surveys or during recent past.
Possible: Species not observed on the sites, but it could occur there from time to time.
Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient
Absent: Species not observed on the sites, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered
FT	Federally Threatened
FPE	Federally Endangered (Proposed)
FC	Federal Candidate

CE	California Endangered
CT	California Threatened
CR	California Rare
CP	California Protected
CSC	California Species of Special Concern

CNPS	California Native Plant Society Listing
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3	Plants about which we need more information – a review list
4	Plants of limited distribution – a watch list

2.3 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG) and the California Regional Water Quality Control Board (RWQCB) (see *Section 3.2.4* of this report for additional information).

Jurisdictional waters were absent from the project site.

2.4 ORDINANCE-SIZED TREES

According to a tree survey conducted by David J. Powers & Associates in October of 2004, there are a total of 256 trees occur on the site (Table 3).

Table 3. Summary of Tree Survey (David Powers & Associates 2004)

Diameter	Tree Type			Total
	Orchard	Non-Native	Native	
<12"	25	91	5	121
12"-17"	16	55	13	84
>/=18"	6	37	8	51
Total	47	183	26	**256**

Orchard trees consists of primarily walnut trees, with a few apple, pear, apricot, and cherry trees. Native trees include coast live oak and valley oak trees, with non-native trees consisting of all other species. Non-native trees include not only trees not native to California, but those species not naturally occurring in the project vicinity as well. For instance there are trees species that occur in the Santa Cruz Mountains a few miles west of the site (such as the coast redwood and Douglas fir) that could not occur on the valley floor naturally.

The City of San Jose's has a Tree Ordinance (Chapter 13.32 of the Municipal Code), which requires permitting and mitigation for the loss of trees (see *Sections 3.2.5* and *3.3.7* of this report for additional information). Some or all of these trees may fall under this ordinance.

3.0 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are constructed. For example, site development may require the removal of some or all of its existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on a site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. These impacts may be considered significant. "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Reduce substantially the habitat of a fish or wildlife species, including causing a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate an animal community.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

For the purposes of this report, it is assumed that impacts will be focused with the proposed buildings, access roads and other infrastructure. Some minor modifications of the locations of this development would not require a reassessment of project impacts. However, any proposal that results in substantial revisions as to the scope and/or relative location of the roads, residences and associated infrastructure would need to be accompanied by a subsequent assessment to ensure that the project would not result in significant impacts to biotic resources which are not anticipated by the current proposal.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal "endangered species" legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal Endangered Species Acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status." Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the take of a listed species. To "take" a listed species, as defined by the state of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species (16 USC, Section 1532(19), 50

CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal law also protect most bird species. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., scc. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 Birds of Prey

Birds of prey are protected in California under provisions of the State Fish and Game Code, Section 3503.5, (2003), which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto". Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG.

3.2.4 Wetlands and Other "Jurisdictional Waters"

Natural drainage channels and wetlands are considered "Waters of the United States" (hereafter referred to as "jurisdictional waters"). The U.S. Army Corps of Engineers (USACE) regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). The extent of jurisdiction within drainage channels is defined by "ordinary high water marks" on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated either intermittently or permanently), and wetland hydrology according to

methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that will result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWCQB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code (CDFG 2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the drainage in question.

3.2.5 Local Policies or Ordinances

The City of San Jose has a Tree Ordinance (Chapter 13.32 of the Municipal Code) that regulates the removal of certain trees. It is the purpose of the ordinance to "promote the health, safety, and welfare of the city by controlling the removal of trees in the city, as trees enhance the scenic beauty of the city, significantly reduce the erosion of topsoil, contribute to increased storm water quality, reduce flood hazards and risks of landslides, increase property values, reduce the cost of construction and maintenance of draining systems through the reduction of flow and the need to divert surface waters, contribute to energy efficiency and the reduction of urban temperatures, serve as windbreaks and are prime oxygen producers and air purification systems."

An "ordinance tree" is defined as any native or non-native tree with a circumference of 56 inches (diameter of 18 inches) at 24 inches above the natural grade of slope. For multi-trunk trees, the

circumference is measured as the sum of the circumferences of all trunks at 24 inches above the natural grade of slope. A tree removal permit is required from the City prior to the removal of any trees covered under the ordinance. Prior to the issuance of a removal permit, the City requires that a formal tree survey be conducted which indicates the number, species, trunk circumference and location of all trees which will be removed or impacted by the project.

3.3 IMPACTS SPECIFIC TO THE PROJECT SITE

The proposed project consists of the construction of commercial and residential development on the 28-acre project site. This development would include not only the building footprints, but also all necessary infrastructures (roadways, parking lots, etc.). The project also calls for the designation of approximately two acres of open space/parks along the southern boundary of the site. Therefore, the mass majority of the site will be converted to a developed land use. As discussed above, activities resulting in impacts to biotic resources may be regulated by local, state, and federal laws. The natural resource issues specific to this project are discussed in detail below.

3.3.1 Loss of Habitat for Special Status Plants

Potential Impact. Of the 22 special status plant species potentially occurring in the project vicinity, all have been ruled out as occurring on the site due to the absence of suitable habitat for these species. The grassland species that are known to occur in the vicinity of the site either occur on serpentine or alkaline soils or within wetlands habitats, all of which are absent from the site.

Mitigation. None required.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impact. Twenty-five special status animal species occur, or once occurred, regionally (see Table 2). Of these, 14 species would be absent from or unlikely to occur on the site. These include the Bay checkerspot butterfly, California tiger salamander, California red-legged frog, foothill yellow-legged frog, western pond turtle, golden eagle, peregrine falcon, willow

flycatcher, Vaux's swift, black swift, California horned lark, tricolored blackbird, San Francisco dusky-footed woodrat, and ringtail.

Other species might rarely or occasionally occur on the site as transients, migrants, or foragers, but are not expected to nest/breed on the site. These include the Cooper's hawk, sharp-shinned hawk, northern harrier, merlin, prairie falcon, pallid bat, Townsend's big-eared bat, and California mastiff bat.

The remaining special status animal species from Table 2 may occur more frequently as regular foragers or may be resident to the site. These include the white-tailed kite, burrowing owl, and loggerhead shrike. However, no stick nests were observed on the project site, and there does not appear to be historic evidence of raptors or shrikes nesting on-site. All of the above species are relatively common regionally and the small amount of habitat loss would result in a less-than-significant impact to habitat available to these species regionally (see however, *Section 3.3.7 Disturbance to Active Raptor Nests*, below).

Mitigation. None required.

3.3.3 Loss of Habitat for Native Wildlife

Potential Impact. The proposed project will result in the loss of disturbed non-native grassland habitat. The site comprises of a portion of the wildlife's entire home range or territory. As such, some species may disperse through the site, but most wildlife presently using the site do so as part of their normal movements for foraging, mating, and caring for young. Individuals of the various vertebrate species presently occupying the site would be displaced or lost from the development area. While grasslands provide habitat for a number of native wildlife species, this habitat is relatively common in the region.

However, while the previous section (3.3.2) concludes that project impacts would result in less-than-significant impacts to loss of habitat for special status animals, project development could potentially result in harm or injury to individual raptors. There are a number of large trees in the southeast corner and within the developed portion of the site, which provide breeding habitat for

tree-nesting raptors; however no stick nests were observed within these trees. Suitable habitat for the burrowing owl is present on site due to the presence of ground squirrel burrows. Protocol-level burrowing owl surveys were conducted in the mornings of July 13 and 15 and evenings of July 5 and 14. No individuals or signs (i.e. white wash, pellets, feathers) of burrowing owls were observed during these surveys.

Therefore, as of July 2004, tree nesting raptors and burrowing owls were not currently nesting on the site, but as volant species, raptors could move onto the site prior to site development. If a raptor were to nest on the site in the future prior to construction, such activities could result in the abandonment of active nests or direct mortality to these birds. Future construction activities that would adversely affect future nesting activity or result in the mortality of individual birds constitute a violation of federal and state laws (see discussion in *Section 3.2.3*) and are considered significant adverse impacts.

Mitigation. The implementation of the following measures is to ensure that raptors (hawks and owls) are not disturbed during the breeding season.

- A qualified ornithologist will conduct a pre-construction survey for nesting raptors (including both tree and ground nesting raptors) on site within 30 days of the onset of ground disturbance, if ground disturbance is to occur during the breeding season (February 1 to August 31). These surveys will be based on the accepted protocols (e.g., as for the burrowing owl) for the target species. These surveys will explicitly consider the burrowing owl as a potential target species and pre-construction efforts will be conducted according to the most recent protocol. If a nesting raptor were to be detected, an appropriate construction buffer would be established. Actual size of buffer would depend on species, topography, and type of construction activity that would occur in the vicinity of the nest.

- A qualified ornithologist will conduct pre-construction surveys for burrowing owls during the non-breeding season. Pre-construction surveys during the non-breeding season are not necessary for tree nesting raptors, as they are expected to

abandon their roosts during construction. If pre-construction surveys (conducted either during the breeding or non-breeding season) determine that burrowing owls occupy the site just prior to construction, then a passive relocation effort (blocking burrows with one-way doors) maybe necessary to ensure that the owl is not harmed or injured during construction.

Implementation of the above measures will fully mitigate impacts to nesting and burrowing raptors.

3.3.4 Interference with the Movement of Native Wildlife

Potential Impact. The area proposed for development on the site consists of non-native grassland habitat and developed land, which support an assemblage of native wildlife species. The movements of various species on- and off-site vary depending on the species in question. One must differentiate between animals' consistent use patterns in order to assess the importance of an area as a "movement corridor." Wildlife movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements. The site is almost entirely surrounded by development and is considered an infill property. The only natural habitat in the immediate vicinity of the site is Yerba Buena Creek. However, Yerba Buena Road is located between the site and the creek habitat, creating a significant barrier for wildlife in the creek attempting to access the site. Therefore, due to the infill nature of the proposed development and the site's close proximity to densely populated areas, this property is not believed to be a significant movement corridor for native wildlife. Project development is expected to have a less-than-significant impact on corridor-type movements of native wildlife.

Mitigation. None required.

3.3.5 Disturbance to Waters of the U.S. or Riparian Habitats

Potential Impact. Waters of the U.S. and riparian habitats are absent from the project site. The site consists entirely of upland habitat.

Mitigation. None required.

3.3.6 Degradation of Water Quality in Seasonal Drainages, Stock Ponds and Downstream Waters

Potential Impact. Eventual site development may require grading that leaves the soil of construction zones barren of vegetation and, therefore, vulnerable to sheet, rill, or gully erosion. Eroded soil is generally carried as sediment in surface runoff to be deposited in natural creek beds, canals, and adjacent wetlands. Furthermore, urban runoff is often polluted with grease, oil, pesticide and herbicide residues, heavy metals, etc. These pollutants may eventually be carried to sensitive wetland habitats used by a diversity of native wildlife species. The deposition of pollutants and sediments in sensitive wetland habitats would be considered a potentially significant adverse environmental impact.

Mitigation. The applicant must comply with the provisions of a City of San Jose's grading permit, including standard erosion control measures that employ best management practices (BMPs). Such compliance will result in no impact to water quality in seasonal creeks, reservoirs, and downstream waters from the proposed project.

3.3.7 Local Policies or Ordinance Protecting Biological Resources

Impacts. The only policy or ordinance that this project will need to abide by is the City of San Jose Tree Ordinance. A formal tree survey was completed by David J. Powers & Associates in October of 2004. At the time of this survey, 256 trees were identified on the property. The removal of any or all of the onsite trees may require a permit from the City, along with

appropriate mitigation measures for the removal of trees. Therefore, the loss of ordinance trees would constitute a significant impact under CEQA.

Mitigation. Project build out will result in the loss of the majority of the existing onsite trees. The City of San Jose requires that prior to the removal of any sized tree, a permit application be submitted, including the proposed mitigation for the loss of trees. The project site is unique in that the existing trees were all planted, thereby not occurring naturally. Of the 256 onsite trees, 209 may fall under the City's tree ordinance; the 47 trees that are part of the orchard would not fall under the City's ordinance. Of the 209 non-orchard trees, only 26 are of a native species, coast live oak and valley oak.

Typically, the City requires that mitigation for the loss of all trees be implemented with ratios ranging from 1:1 (replacement planting: tree loss) to 4:1 depending on the size of the individual tree. The mitigation for the 26 native trees should follow the typical requirements, with appropriate compensation ratios and the replacement with native trees. However, due to the fact that the remaining trees are not only non-native species, but also part of landscaping, the required mitigation should be lessened.

Implementation of the below measures will mitigate for the loss of onsite trees:

Native Replacement Plantings	*NUMBER OF TREES*
• The 8 large sized native trees will be compensated at a 4:1 ratio	32
• The 13 medium sized native trees will be compensated at a 2:1 ratio	26
• The 5 small sized native trees will be compensated at a 1:1 ratio	5
Replacement Plantings	
• The 209 non-native trees will be compensated at a 1.5:1 ratio	313
TOTAL	**376**

Where possible, this mitigation can be compensated for through an onsite Landscape Plan. However, if the mitigation obligations cannot be fulfilled onsite, the applicant can either plant

offsite or donate money to *San Jose Beautiful* or *Our City Forest* to be used towards tree plantings.

Onsite plantings will be required to be irrigated for a period of not less than three years and will be maintained during that period, including protection from invasive species and wildlife browsing. For any trees retained in the immediate vicinity of construction or demolition areas, problems of soil compaction within the root zone resulting from heavy construction equipment needs to be prevented. In order to minimize construction and demolition impacts to remaining trees, barrier fencing will be installed around the dripline of all retained trees or at the edge of construction areas. Any construction or demolition activities taking place within the dripline of retained trees will be done by hand or with light equipment that does not cause soil compaction.

3.3.8 Confliction with Provisions of an Adopted Conservation Plan

Potential Impact. An adopted or a Draft Habitat Conservation Plan does not exist for the area in which the project is proposed. Therefore, this significance criterion does not apply.

Migiation. None required.

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APPENDIX A
TERRESTRIAL VERTEBRATES OF THE STUDY AREA

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TERRESTRIAL VERTEBRATES OF THE STUDY AREA

Listed below are those species that may reasonably be expected to use the habitats of the project site routinely during some or all of the year. The list is not intended to include birds that are vagrants or occasional transients. Species observed during the July 5, 13, 14, and 15 of 2004 field surveys have been noted with an asterisk.

CLASS AMPHIBIA (Amphibians)	
ORDER CAUDATA (Salamanders)	
FAMILY SALAMANDRIDAE (Newts)	
California newt	*Taricha torosa*
FAMILY PLETHODONTIDAE (Lungless Salamanders)	
Ensatina	*Ensatina eschscholtzii*
Black salamander	*Aneides flavipunctatus*
Arboreal salamander	*Aneides lugubris*
California slender salamander	*Batrachoseps attenuatus*
Pacific slender salamander	*Batrachoseps pacificus*
CLASS REPTILIA (Reptiles)	
ORDER SQUAMATA (Lizards and Snakes)	
SUBORDER SAURIA (Lizards)	
FAMILY PHRYNOSOMATIDAE	
*Western fence lizard	*Sceloporus occidentalis*
FAMILY SCINCIDAE (Skinks)	
Skilton skink	*Eumeces skiltonianus skiltonianus*
Gilbert's skink	*Eumeces gilberti*
FAMILY ANGUIDAE (Alligator Lizards and Relatives)	
California alligator lizard	*Elgaria multicarinata*
SUBORDER SERPENTES (Snakes)	
FAMILY COLUBRIDAE (Colubrids)	
Ringneck snake	*Diadophis punctatus*
Sharp-tailed snake	*Contia tenuis*
Racer	*Coluber constrictor*
Coachwhip	*Masticophis flagellum*
Gopher snake	*Pituophis catenifer*
Common kingsnake	*Lampropeltis getula*
California black-headed snake	*Tantilla planiceps*
Night snake	*Hypsiglena torquata*
FAMILY VIPERIDAE (Vipers)	
Western rattlesnake	*Crotalus viridis*
CLASS AVES (Birds)	
ORDER CICONIIFORMES (Herons, Storks, Ibises and Relatives)	
FAMILY CATHARTIDAE (New World Vultures)	
Turkey vulture	*Cathartes aura*
ORDER FALCONIFORMES (Vultures, Hawks and Falcons)	
FAMILY ACCIPITRIDAE (Hawks, Old World Vultures and Harriers)	
White-tailed kite	*Elanus leucurus*
Sharp-shinned hawk	*Accipiter striatus*
Cooper's hawk	*Accipiter cooperii*

Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
Ferruginous hawk	*Buteo regalis*
Rough-legged hawk	*Buteo lagopus*
FAMILY FALCONIDAE (Caracaras and Falcons)	
American kestrel	*Falco sparverius*
Merlin	*Falco columbarius*
Praire falcon	*Falco mexicanus*
ORDER GALLIFORMES (Magapodes, Curassows, Pheasants and Relatives)	
FAMILY PHASIANIDAE (Quails, Pheasants and Relatives)	
Ring-necked pheasant	*Phasianus colchicus*
FAMILY ODONTOPHORIDAE (New World Quail)	
California quail	*Callipepla californica*
ORDER CHARADRIIFORMES (Shorebirds, Gulls and Relatives)	
FAMILY CHARADRILDAE (Lapwings and Plovers)	
*Killdeer	*Charadrius vociferus*
ORDER COLUMBIFORMES (Pigeons and Doves)	
FAMILY COLUMBIDAE (Pigeons and Doves)	
Rock dove	*Columba livia*
Band-tailed pigeon	*Columba fasciata*
*Mourning dove	*Zenaida macroura*
ORDER STRIGIFORMES (Owls)	
FAMILY TYTONIDAE (Barn Owls)	
Barn owl	*Tyto alba*
FAMILY STRIGIDAE (Typical Owls)	
Western screech owl	*Otus kennicottii*
Great horned owl	*Bubo virginianus*
ORDER CAPRIMULGIFORME (Goatsuckers and Relatives)	
FAMILY CAPRIMULGIDAE (Goatsuckers)	
Common poorwill	*Phalaenoptilus nuttallii*
ORDER APODIFORMES (Swifts and Hummingbirds)	
FAMILY APODIDAE (Swifts)	
Vaux's swift	*Chaetura vauxi*
FAMILY TROCHILIDAE (Hummingbirds)	
Anna's hummingbird	*Calypte anna*
Allen's hummingbird	*Selasphorus sasin*
ORDER PICIFORMES (Woodpeckers and Relatives)	
FAMILY PICIDAE (Woodpeckers and Wrynecks)	
Acorn woodpecker	*Melanerpes formicivorus*
Red-breasted sapsucker	*Sphyrapicus ruber*
*Nuttall's woodpecker	*Picoides nuttallii*
Downy woodpecker	*Picoides pubescens*
Hairy woodpecker	*Picoides villosus*
Northern flicker	*Colaptes auratus*
ORDER PASSERIFORMES (Perching Birds)	
FAMILY TYRANNIDAE (Tyrant Flycatchers)	
Western wood-pewee	*Contopus sordidulus*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Ash-throated flycatcher	*Myiarchus cinerascens*
FAMILY LANIIDAE (Shrikes)	

Loggerhead shrike	*Lanius ludovicianus*
FAMILY VIREONIDAE (Typical Vireos)	
Cassin's vireo	*Vireo cassinii*
Hutton's vireo	*Vireo huttoni*
Warbling vireo	*Vireo gilvus*
FAMILY CORVIDAE (Jays, Magpies and Crows)	
*Western scrub-jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
FAMILY HIRUNDINIDAE (Swallows)	
Tree swallow	*Tachycineta bicolor*
Violet-green swallow	*Tachycineta thalassina*
Bank swallow	*Riparia riparia*
Cliff swallow	*Petrochelidon pyrrhonota*
Barn swallow	*Hirundo rustica*
FAMILY PARIDAE (Titmice and Relatives)	
Oak titmouse	*Baeolophus inornatus*
FAMILY AEGITHALIDAE (Bushtit)	
Bushtit	*Psaltriparus minimus*
FAMILY SITTIDAE (Nuthatches)	
White-breasted nuthatch	*Sitta carolinensis*
FAMILY TROGLODYTIDAE (Wrens)	
Bewick's wren	*Thryomanes bewickii*
House wren	*Troglodytes aedon*
Winter wren	*Troglodytes troglodytes*
FAMILY REGULIDAE (Kinglets)	
Ruby-crowned kinglet	*Regulus calendula*
FAMILY SYLVIIDAE (Old World Warblers and Gnatcatchers)	
Blue-gray gnatcatcher	*Polioptila caerulea*
FAMILY TURDIDAE (Thrushes)	
Western bluebird	*Sialia mexicana*
Hermit thrush	*Catharus guttatus*
American robin	*Turdus migratorius*
FAMILY TIMALIIDAE (Babblers)	
Wrentit	*Chamaea fasciata*
FAMILY MIMIDAE (Mockingbirds and Thrashers)	
Northern mockingbird	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*
FAMILY STURNIDAE (Starlings and Allies)	
European starling	*Sturnus vulgaris*
FAMILY PARULIDAE (Wood Warblers and Relatives)	
Orange-crowned warbler	*Vermivora celata*
Common yellowthroat	*Geothlypis trichas*
FAMILY EMBERIZIDAE (Emberizines)	
Spotted towhee	*Pipilo maculatus*
*California towhee	*Pipilo crissalis*
Lark sparrow	*Chondestes grammacus*
Sage sparrow	*Amphispiza belli*
Savannah sparrow	*Passerculus sandwichensis*
Fox sparrow	*Passerella iliaca*
Song sparrow	*Melospiza melodia*

White-throated sparrow	*Zonotrichia albicollis*
White-crowned sparrow	*Zonotrichia leucophrys*
Golden-crowned sparrow	*Zonotrichia atricapilla*
*Dark-eyed junco	*Junco hyemalis*
FAMILY CARDINALIDAE (Cardinals, Grosbeaks and Allies)	
Black-headed grosbeak	*Pheucticus melanocephalus*
Lazuli bunting	*Passerina amoena*
FAMILY ICTERIDAE (Blackbirds, Orioles and Allies)	
Red-winged blackbird	gelaius phoeniceus
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*
FAMILY FRINGILLIDAE (Finches)	
Purple finch	*Carpodacus purpureus*
House finch	*Carpodacus mexicanus*
Lesser goldfinch	*Carduelis psaltria*
American goldfinch	*Carduelis tristis*
FAMILY PASSERIDAE (Old World Sparrows)	
House sparrow	*Passer domesticus*

CLASS MAMMALIA (Mammals)	
ORDER DIDELPHIMORPHIA (Marsupials)	
FAMILY DIDELPHIDAE (Opossums)	
Virginia opossum	*Didelphis virginiana*
ORDER INSECTIVORA (Insectivores)	
FAMILY SORICIDAE (Shrews)	
Ornate shrew	Sorex ornatus
FAMILY TALPIDAE (Moles)	
Broad-footed mole	Scapanus latimanus
ORDER CHIROPTERA (Bats)	
FAMILY VESPERTILIONIDAE (Evening Bats)	
Little brown myotis	*Myotis lucifugus*
Yuma myotis	*Myotis yumanensis*
California myotis	*Myotis californicus*
Western pipistrelle	*Pipistrellus hesperus*
Big brown bat	*Eptesicus fuscus*
Western red bat	*Lasiurus blossevillii*
Hoary bat	*Lasiurus cinereus*
Townsend's big-eared bat	Corynorhinus townsendii
Pallid bat	Antrozous pallidus
FAMILY MOLOSSIDAE (Free-tailed Bats)	
Western mastiff bat	Eumops perotis
ORDER LAGOMORPHA (Rabbits, Hares and Pika)	
FAMILY LEPORIDAE (Rabbits and Hares)	
Brush rabbit	*Sylvilagus bachmani*
Black-tailed jackrabbit	*Lepus californicus*
ORDER RODENTIA (Rodents)	
FAMILY SCIURIDAE (Squirrels, Chipmunks and Marmots)	
*California ground squirrel	*Spermophilus beecheyi*
Western gray squirrel	*Sciurus griseus*
FAMILY GEOMYIDAE (Pocket Gophers)	

*Botta's pocket gopher	*Thomomys bottae*
FAMILY HETEROMYIDAE (Pocket Mice and Kangaroo Rats)	
California pocket mouse	*Chaetodipus californicus*
FAMILY MURIDAE (Mice, Rats and Voles)	
Western harvest mouse	*Reithrodontomys megalotis*
California mouse	*Peromyscus californicus*
Deer mouse	*Peromyscus maniculatus*
Dusky-footed woodrat	*Neotoma fuscipes*
California vole	*Microtus californicus*
ORDER CARNIVORA (Carnivores)	
FAMILY CANIDAE (Foxes, Wolves and Relatives)	
Coyote	*Canis latrans*
Gray fox	*Urocyon cinereoargenteus*
FAMILY PROCYONIDAE (Raccoons and Relatives)	
Ringtail	*Bassariscus astutus*
Raccoon	*Procyon lotor*
FAMILY MUSTELIDAE (Weasels and Relatives)	
Long-tailed weasel	M*ustela frenata*
American badger	*Taxidea taxus*
FAMILY MEPHITIDAE (Skunks)	
Striped skunk	*Mephitis mephitis*
FAMILY FELIDAE (Cats)	
Feral cat	*Felis catus*
Bobcat	*Lynx rufus*
ORDER ARTIODACTYLA (Even-toed Ungulates)	
FAMILY CERVIDAE (Deer, Elk and Relatives)	
Black-tailed deer	*Odocoileus hemionus*